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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/072,403 | 02/08/2002 | Klein A. Rodrigues | 2004.ALC | 4788 |
| 7590 | 05/18/2005 | | EXAMINER | |
| Thomas F. Roland NATIONAL STARCH AND CHEMICAL COMPANY P.O. Box 6500 Bridgewater, NJ 08807-0500 | | | DELCOTTO, GREGORY R | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1751 | |

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

VW
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|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/072,403 | RODRIGUES, KLEIN A. | |
| | Examiner | Art Unit | |
| | Gregory R. Del Cotto | 1751 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 24 February 2005.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8 and 15-26 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 26 is/are allowed.
- 6) Claim(s) 1-8, 15-25 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

1. Claims 1-8 and 15-26 are pending. Applicant's arguments and amendments filed 2/24/05 have been entered.

Objections/Rejections Withdrawn

The following objections/rejections as set forth in the Office action mailed 2/24/05 have been withdrawn:

The rejection of claim 15 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, has been withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8 and 15-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification, as originally filed, provides no basis for "wherein said one or more amide monomer units if free of nitrogen linkages linking the polymer backbone to the side chains" as now recited by instant claim 1. The specification does provide

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support for "those not having an amine linkage in the side chains" which is different from what is present in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-8, 15-18, and 20-25 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kirk et al (US 5,843,192).

Kirk et al teach a composition useful in a washing process containing at least one vinyl amide polymer. The vinyl amide polymer contains from 5 to 100 weight percent of at least one vinyl amide monomer, and from 0 to 95 weight percent of one or more vinyl ester monomers. Kirk et al also provides a method of cleaning an article and a method of providing soil resistance to an article using the vinyl amide polymer. See Abstract. The vinyl amide polymer preferably contains less than 3 weight percent of one or more ethylenically unsaturated carboxylic acid monomers, based on the total weight of the monomers. The carboxylic acid monomers include acrylic acid, methacrylic acid, maleic acid, itaconic acid, etc. The vinyl amide polymer preferably contains less than 3 weight percent of one or more acrylamide monomers. Suitable acrylamide monomers include acrylamide, N,N-dimethylacrylamide, acrylamidoalkylenesulfonic acid, etc. See column 4, lines 30-50 and claim 1. The cleaning solution may optionally contain additional components such as surfactants, builders, buffering agents, bleaching agents, enzymes, perfumes, etc. See column 5, lines 1-35. The treatment solution is contacted with the article by immersing the article with the solution. See column 6, lines 25-45.

Specifically, Kirk et al teach a composition containing 8% linear alkyl benzene sulfonate, 16% alcohol ether sulfate, 6% nonionic surfactant, 0.5% enzyme, 2% vinyl amide polymer, etc. See column 14, lines 50-69. Note that, the Examiner maintains that the vinyl amide polymer would inherently have the same mole percent of amide monomer as recited by the instant claims. Accordingly, the broad teaching of Kirk et al are sufficient to anticipate the material limitations of the instant claims.

Alternatively, even if the broad teaching of Kirk et al are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to arrive at the claimed mole percent of amide polymer of the composition in order to provide the optimum soil resistant properties to the composition since Kirk et al teach that the amount and type of amide used in formulating the resultant polymer may be varied.

Response to Arguments

With respect to the rejection of the claims under 35 USC 112, 1st paragraph, this rejection has been maintained in that the specification, as originally filed, provides no basis for "wherein said one or more amide monomer units if free of nitrogen linkages linking the polymer backbone to the side chains" as recited by the instant claims. This is different from the limitation "those not having amine linkages in the side chains" which is supported by the specification. The latter statement excludes all amine linkages in the side chains while the present limitation allows for nitrogen linkages as long as they don't link the polymer backbone to the side chains.

With respect to Kirk et al, Applicant states that unlike the vinyl amide monomers of Kirk et al, the amide monomers as recited by the instant claims have no nitrogens linked to the polymer backbone in the side chains. First, as stated previously, the Examiner sees no distinction between the polymers of Kirk et al and those recited by the instant claims. Note that, clearly nitrogens can be present in the polymer backbone as indicated by instant claim 2 in which it states "wherein said amide monomer has at least one amide moiety in the polymer backbone...". The amide monomer as taught by

Kirk et al does contain a nitrogen but this would be in the polymer backbone as recited by instant claim 2. Additionally, claim 1 recites an amide monomer unit in the polymer which would have a nitrogen atom as a repeating unit which would not be considered in the side chain. The Examiner maintains that the polymers as taught by Kirk et al fall within the scope of the instant claims.

For better clarification of the claimed invention, it is suggested that Applicant call the Examiner to discuss the outstanding issues and prior art.

Allowable Subject Matter

Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

None of the references of record, alone or in combination, teach or suggest a polymer treated substrate having associated thereon a polymer containing an amide monomer, a hydroxy alkyl urea monomer, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (571) 272-1312. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gregory R. Del Cotto
Primary Examiner
Art Unit 1751

GRD
May 15, 2005